How demographic and economic factors have influenced ways of residing measured by urbanisation, type of dwelling, and type of tenure

Vestergaard, Hedvig

Publication date:
2014

Document Version
Accepted author manuscript, peer reviewed version

Paper prepared for the Nordic Urban and Housing Research Conference (NSBB) 2014: *Urban renewal – diversified responses to the development of housing and public space in cities* in Tallinn University of Technology, Tallinn, Estonia, 8–10, October, 2014

Title: *How demographic and economic factors have influenced ways of residing measured by urbanisation, type of dwelling, and type of tenure*

Author*: Hedvig Vestergaard, hev@sbi.aau.dk*

Abstract

The purpose of this paper is to present and discuss factors influencing ways of residing up to and during the years leading up to the Global Financial Crisis (GFC) as well as presently. The activity in the housing construction sector in the Nordic and Baltic countries was at a very high level until 2005–2007. Urban sprawl and overinvestment in business premises and housing were important risks to be considered. The high economic activity also led to an increase in the cost of housing and hence to affordability problems in major cities. Many new urban quarters and towns came into planning in this period. The aim is especially to give an overview of how the economic and financial crisis affected the ways of residing in ten countries in: a) the Nordic countries, b) Western Europe, and in c) Eastern Europe. This is done by analysing how demographic and economic factors have influenced ways of residing measured by urbanisation, type of dwelling, and type of tenure.

Acknowledgement: This paper has been developed within the frame work of a Nordic-Baltic trans-disciplinary R&D group, focusing on urban residential transformation processes and their impacts on quality of life. Here I owe a special thanks to Christian Deichmann Haagerup who has contributed to earlier versions of this paper. See (Vestergaard & Haagerup, C. D. 2011).

Introduction

Ways of residing are influenced by cultural and historic as well as the economic and societal developments. All of these developments interact. However, the outcome as ways of residing will be framed by the historic background as well as how available resources are accessed and managed. Unexpected and fast changes in economic conditions and financial policies will impact the scene for planning, for realising, and for framing and reframing ways of residing.

This paper defines 'ways of residing' and analyses which factors influence it in ten countries in Europe: a) the Nordic countries, b) Western Europe, and in c) Eastern Europe.

'Ways of residing' must be seen against the background of the current Global Financial Crisis (GFC). As is known, this crisis derives from the bursting of the real-estate bubble in the US in 2006 (Shiller 2008; DiPasquale and Wheaton 1996). The US housing bubble involved excessive lending and expansion of the money supply as well as low interest rates. One of the results was severe losses for capital providers across the world. Important factors were unfounded expectations of ever increasing house prices until 2005–2008, speculative investments in real-estate, and easy credit to households that could not service the loans. This resulted in oversupply of dwellings, and the bursting of the housing bubble. The housing market in the US collapsed.

The same development was seen in European countries. Houses could not be sold, households went bankrupt, and homelessness increased. In some cases construction projects have not been finished as planned, recent projects was hard to sell or let and planned projects were postponed or abandoned. Private investors, banks and mortgage institutes lost capital on already finished or half-finished projects. In some countries, the number of households and businesses in foreclosure increased, and new investments have ground to a halt.

The GFC is *current*. In spite of much talk to the contrary, the crisis continues unabated. This time, however, not as much a consequence of housing bubbles, but recent developments on the global political scene, ie Western political and economic sanctions against Russia over the Ukraine debacle and the counter sanctions against the West from Russia. As a consequence the crisis is prolonged and deepened.

Countries Covered in this Study

The following countries are covered in this paper: Denmark, Norway, Sweden, Finland, and Iceland, Belgium, France, UK, Estonia, and Bulgaria. Statistics on the countries are given in Table 1:

Parameter	National Code									
	BE	**BG**	**DK**	**EE**	**FI**	**FR**	**GB**	**IS**	**NO**	**SE**
Population	11.094.850	7.327.224	5.580.516	1.325.217	5.401.267	65.287.861	63.495.303	319.575	4.985.870	9.482.855
Dwellings	5.043.000	3.909.348	2.680.000	651.000	2.784.000	31.264.000	23.500.000	129.363	2.449.210	4.503.000
Percentage of detached houses	72%	n/a	59%	32%	40%	56%	n/a	50%	73%	45%
Percentage of owner-occupied dwellings	68%	97%	53%	96%	66%	57%	69%	88%	72%	56%
Urbanisation	54%	44%	34%	44%	28%	46%	60%	64%	52%	21%
Total fertility rate	1,79	1,50	1,73	1,56	1,80	2,01	1,92	2,04	1,85	1,91
Percentage 65 years and over	17%	19%	17%	18%	18%	17%	17%	13%	15%	19%
Net migration per 1,000 inhabitants	7,7	-1,1	2,8	-2,8	3,0	0,6	3,4	-3,9	9,1	5,2
Unemployment rate	8%	13%	7%	8%	8%	10%	7%	5%	3%	8%
Income inequality (Gini)	26%	34%	28%	32%	26%	30%	33%	24%	23%	24%
GDP per capita euro	33.876	5.449	43.948	13.141	35.612	31.128	30.268	33.084	78.050	43.006
Growth in GDP	0,7%	1,5%	-0,4%	0,6%	0,0%	0,4%	0,3%	0,5%	0,9%	1,3%
Divorces per 1,000 inhabitants	2,5	1,5	2,7	2,3	2,5	2,0	2,1	1,7	2,1	2,5

Table 1 Key figures for the ten countries

Source: Eurostat, 2012; Haffner & Dol 2010, National Statistical Institute of Bulgaria, and Statistics Estonia 2012

We shall divide the ten countries into the following country groups which will be referred to throughout:

- five Nordic welfare states (Denmark, Norway, Sweden, Finland, and Iceland). Country group: Nordic
- three former imperial nations (Belgium, France, and the UK). Country group: Western European
- one country having regained independence after the Soviet occupation and now member of the EU (Estonia), and one country from the former socialist block and now new member of the EU (Bulgaria). Country group: Eastern European

The five Nordic welfare states have relatively high incomes and only Denmark and Iceland have been very negatively affected by the GFC. Iceland devaluated the Krone (ISK) and reconstructed the financial sector. The Danish Krone (DKK) is pegged to the Euro and due to that the country is experiencing a relatively high unemployment rate for a prolonged period. High wages are also a challenge to the country's competitiveness.

The housing markets in the five countries are quite diverse. Norway and Iceland are historically homeowner countries. Social housing is only for very special groups. A little over half of the housing stock in Denmark and Sweden is owner occupied (the numbers include the percentage of co-operatives). Two thirds of all housing in Finland is owner-occupied. Finland is part of the euro area and is the only Nordic country to use the single currency, the Euro. Norway and Iceland are not members of the EU while Denmark and Sweden are members.

Iceland is the smallest and the most urbanised of the Nordic countries and was the one to be hit most severely by the GFC, especially since the housing debt is linked to consumer prices, which have risen by 30 per cent after the GFC. The construction activity around the capital Reykjavik increased massively in the years leading up to the crisis because of rising house prices, but both prices and construction activity have fallen dramatically since then.

Norway, on the other hand, kept largely clear of the crisis thanks to a strong economy with a large oil and gas sector. Like many other countries, Norway experienced urbanisation during the 20th century, and the urbanisation is still high despite a strong tradition for supporting the development of the peripheral regions. At the moment, over half of the population lives in densely populated areas. Currently the overall population of Norway is also increasing due to a high fertility and immigration.

The three former imperial nations Belgium, France, and especially the UK are homeowner countries. However, private rented and social housing make up about one third of their housing stocks. Especially France has on-going efforts to improve liveability in social housing.

Belgium and France also share some similarities in the housing sector. The acute housing crises after World War II led in France to vast building schemes of subsidized public housing. Belgium also has a public rental housing sector but the owner occupied sector is still larger.

England comprises most of the central and southern two thirds of the island of Great Britain. The most important urban centre is London. There is a large difference in population density when comparing London and the south of England to the north of England. In England, 82 per cent of all dwellings are houses while 17 per cent are flats; even in London 55 per cent of all dwellings are houses, and 65 per cent of English households own their own home. The centralization of both

population and economic activity around London has led to large price increases in this area. These increases became a contributing factor to the GFC.

The two Eastern European countries have since the early 1990s transformed their economic systems and privatised the housing stock. Housing has been privatised by selling off to the residents and by restitution of former socialised property to original owners. In Estonia, about 96 per cent of all housing is privatised and about two thirds are located in blocks of flats and high-rises while 32 per cent is detached housing (incl. semi-detached and terraced housing) (Statistics Estonia 2012). In Bulgaria, most of the prefabricated flats in housing blocks built until 1989 are privatised and today nearly all housing is owner-occupied. In both countries a boom of new private housing construction after 2000 was accompanied by urban sprawl of mainly relatively low rise housing often without sufficient infrastructure. However, this investment boom stopped abruptly in 2007 when the GFC put an end to investments in speculative construction projects and house prices and construction activity decreased very rapidly. Although there has been investment in new housing, and housing conditions have improved during the last twenty years, the housing standards measured as square meters per inhabitant is still lower than, for instance, in the Nordic countries.

Bulgaria and Estonia were more negatively affected by the economic crisis than the three Western European and the five Nordic countries. The privatization policy also gives special challenges for the municipalities because of a large unmet demand for public housing.

Economic Development

The economic recession following the financial crisis has affected all of the ten countries with different intensity. The result was a drop in the economic activity, falling or stagnating house prices and a drop in the construction of new dwellings. This has, among other things, led to rising unemployment, especially among young people.

Using growth in GDP per capita as an indicator, figure 1 shows that the volatility in economic activity has been much higher in the eastern countries than in the western and especially in the Nordic countries.

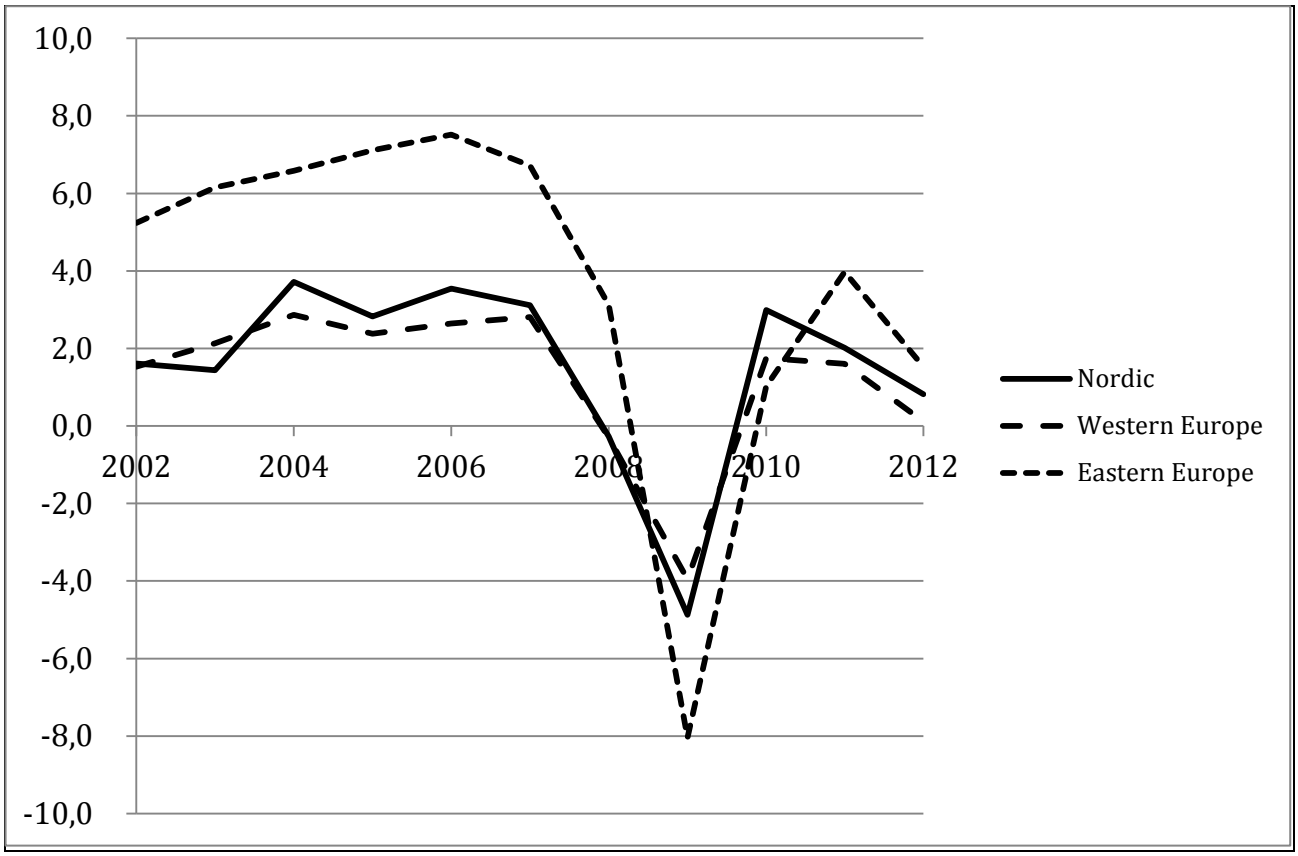

Figure 1 Growth Rates in GDP per capita by Country Group, 2002-2012

Figure 2 shows the development in unemployment in the three country groups. We look at unemployment as such (total unemployment) and youth unemployment in particular.

Unemployment is defined by Eurostat according to the guidelines set down by the International Labour Organisation.

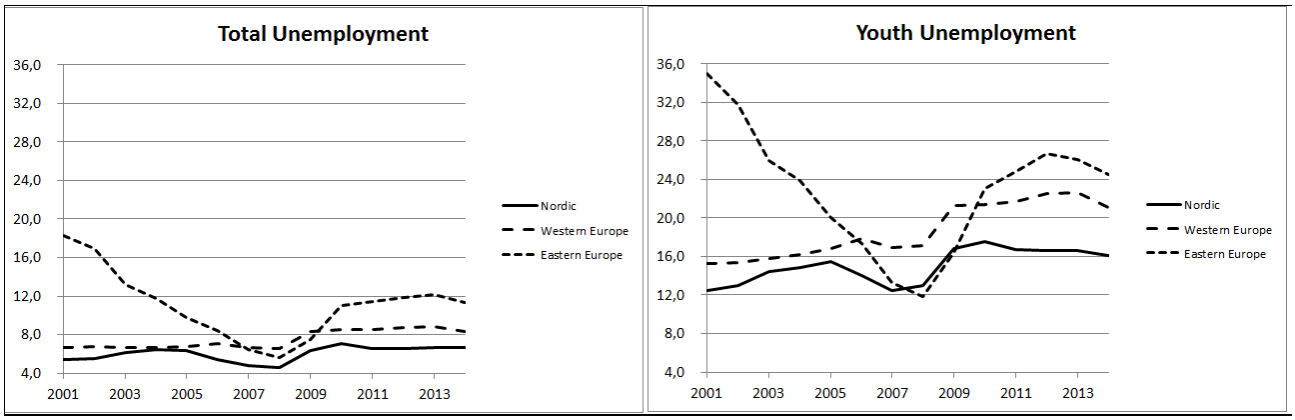

Figure 2 Total Unemployment and Youth Unemployment, 2001-2014

The differences between the three country groups are at once visible. Throughout the period the Nordic countries have fared much better than the other groups. Generally conditions are worse in

the Eastern European countries. What springs to mind from the graphs, though, is the high volatility in the Eastern European countries. The problem of youth unemployment is also clearly visible. Although much more pronounced in the Eastern European countries, it is also significant in the Nordic countries and in Western Europe.

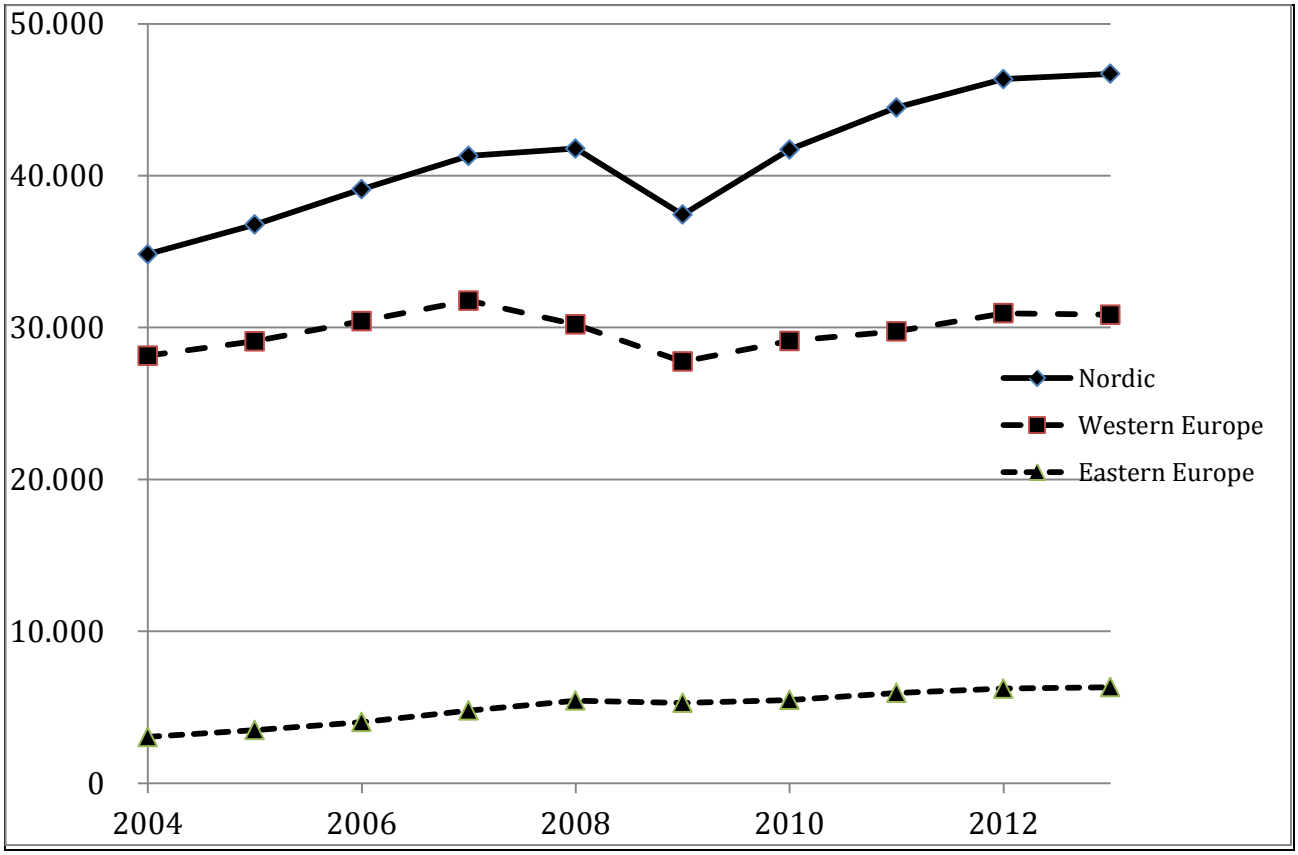

Figure 3 GDP, Euro per capita, current prices

Converted to Euro, there is a large difference between the GDP per capita in the Nordic countries at the top and Estonia and Bulgaria at the bottom (see Figure 3). The other Western countries are at a level in between, although growing at a slower rate.

In all of the ten countries GDP shrunk in 2009 during the financial crisis. But all countries saw GDP increase in nominal values in 2010, and the latest GDP figures suggest that some of the countries are out of the recession. However, the economic activity is still at a lower level than before the global financial crisis.

Because of lack of data availability the following section mostly deals with the housing market in a selection of countries. As the methods for calculating house price indices vary from country to country, caution should be exercised when comparing them.

For Sweden real house prices (i.e. nominal house prices corrected for inflation) have been trending steadily upwards for most of the period, but have fallen by around 2 per cent per year in both 2011 and 2012. In 2013 prices increased by 3.5 per cent.

House prices in Norway have shown a similar pattern to those of Sweden but with a higher overall growth rate, and with a relatively large drop in 2008. But since 2010 house prices in Norway have continued their upward growth of 5-7 per cent annually.

House prices in Denmark, Iceland and in the United Kingdom have shown a very different pattern from that of Sweden and Norway. After the financial crisis hit in 2008 prices decreased markedly in Denmark, Iceland and the United Kingdom. The latest data show that prices increased by around 2 per cent in 2013 in Denmark and the United Kingdom.

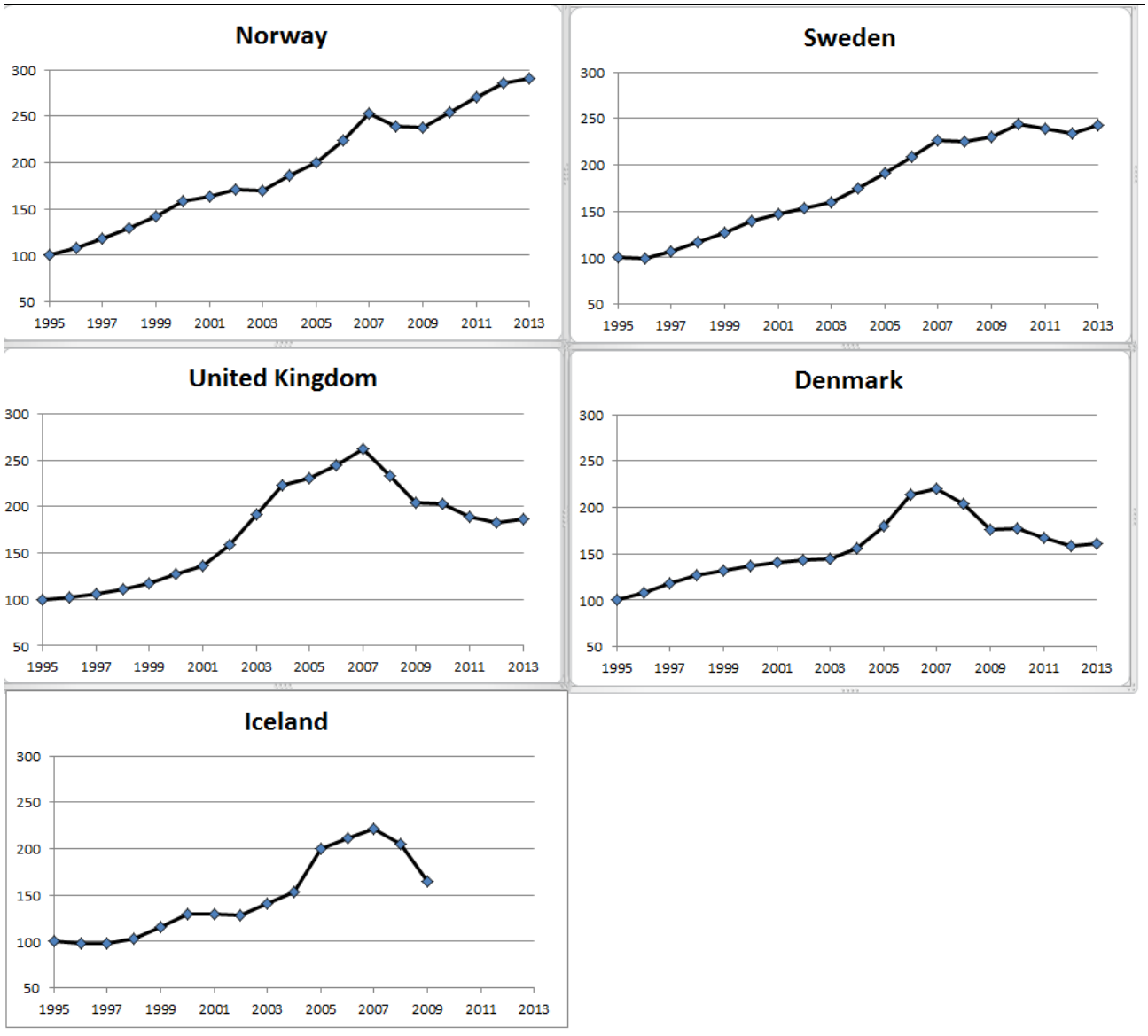

Figure 4 Real house prices in selected countries, 1995=100

Source: National statistical bureaus and own calculations, U.K.: Halifax (Lloyds), data for Iceland includes only the capital region in and around Reykjavik up to 2009.

The rising house prices until 2008 were followed by a rise in the construction of new dwellings, as figure 5 shows. But the stagnating and, in some countries, falling house prices, together with the global financial crisis led to a steep decline in construction activity in the years 2008 to 2011. In

Sweden the construction of new dwellings peaked in 2008, while construction in the other countries in the graph below peaked in 2007.

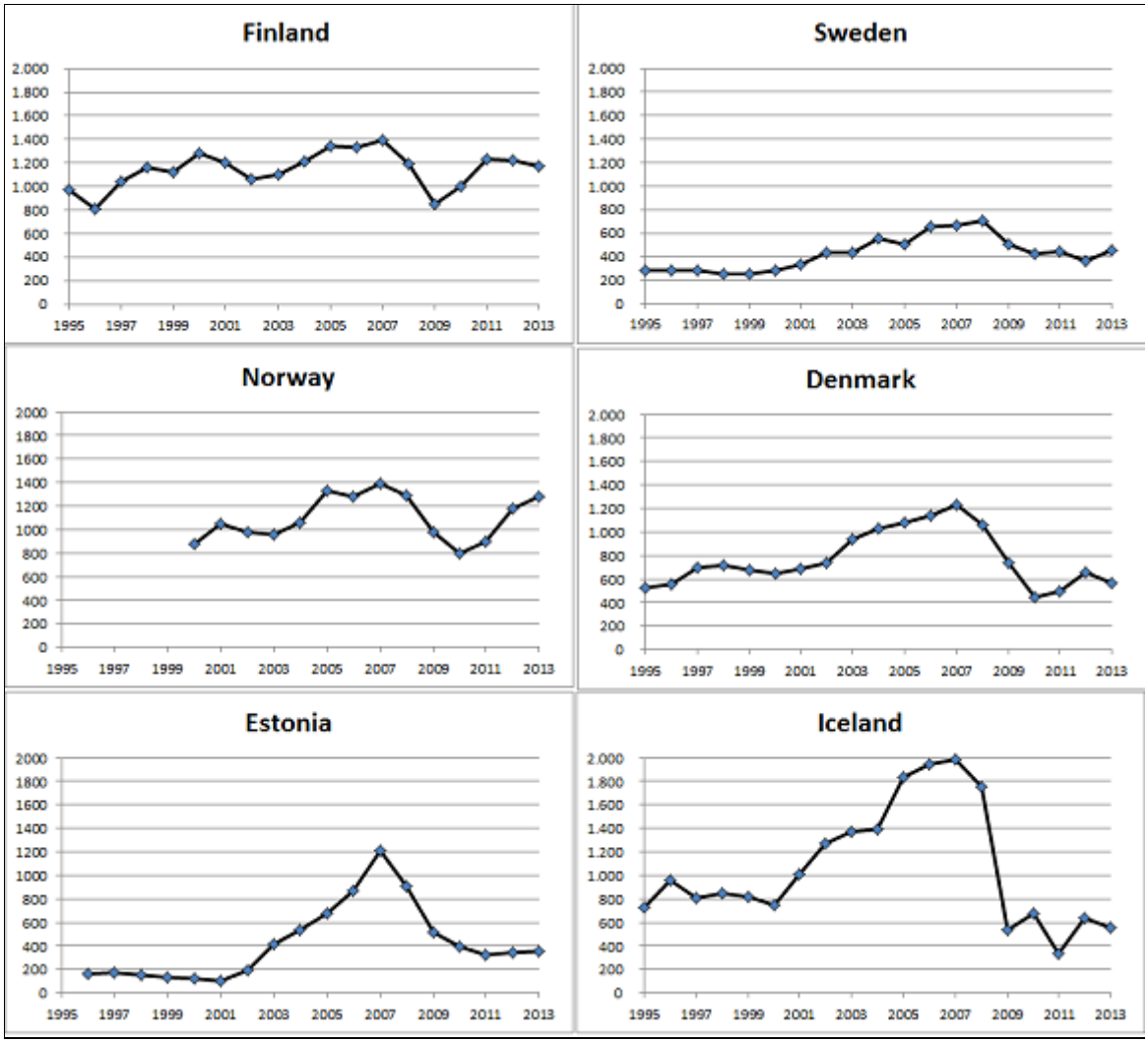

Figure 5 Construction activity, number of completed dwellings per 100,000 households, 1995-2013

Source: National statistical bureaus

To compare the different countries in the figure above, the completed dwellings are related to the number of households in the different countries.

In that comparison Iceland stands out in its peak year (2007) as having a level of completions that far surpasses that of the other countries, namely 2,000 per 100,000 households. After 2007 there has been a dramatic decline in completions.

Sweden peaks in 2008 with around 700 completions per 100,000 households. This translates to 32,000 completed dwellings.

Finland and Norway look much the same with a stationary series in the 800-1,400 per 100,000 households band. Particularly Norway has resumed its house investment level in 2013.

Estonia and Denmark lag much behind their peak year 2007. Denmark has never really regained its foothold in spite of subsidised green investments (Vestergaard 2014).

'Ways of residing' – Future Prospects

Discussions about the future often revolve around assumptions on how people will reside in the future and what their preferences are for type of tenure and type of housing as well as location in rural or urban areas (see for instance: Andersen, Vestergaard, Gottschalk, Groes, Christoffersen and Larsen 2001; Vestergaard 2006; Andersen 2009). Here we shall analyse structural factors having influenced ways of residing in the ten countries in the period 2001─2014.

In this paper, we focus on three categories of dimensions in a residential situation and analyse them against a wider set of structural, socio-economic and demographic data.

We define 'ways of residing' as the physical surroundings in which people live. Surroundings can be understood in a narrow as well as in a broad sense. Narrow definition: What kind of dwelling do people live in? How much space do they have? Do they own their dwelling? Broad definition: Do they live in a bustling city? Or do they live in the countryside?

So ways of residing have three dimensions (operational definition in parenthesis):

- Type of dwelling (percent of population living in a house as opposed to a flat)
- Type of tenure (percent of population owning their dwelling)
- Urbanisation (percent of people living in a densely populated area)

We have analysed these components as responses to certain effects or factors:

- Aging (percent of population 65 years and more)
- Fertility (total fertility rate)
- Growth (growth in GDP per capita)
- GDP per capita
- Divorces (number of divorces per 1,000 inhabitants)
- Unemployment (total unemployment rate)
- Youth unemployment (rate of youth unemployment)
- Income inequality (Gini coefficient)
- Single person households (percent of population living in a household of one person).

These statistics – both on the response side and on the effect side – are available from Eurostat.

However, the period of the time series differ somewhat from statistic to statistic. In order to have complete data for the countries we have computed estimates for the missing data, either by interpolation or by looking at the trend of the data series in the area with missing data.

In our analysis we have seen how each of the nine factors correlates with the three responses. This gives a total of 27 correlations.

It should be emphasised here that correlation – if significant – does not necessarily mean cause–effect, but rather that a response is observed to vary proportionately (+) or disproportionately (-) according to a given factor.

In the table below we have listed the significant correlations between the factors and responses. A positive correlation is marked with a '+' and a negative correlation with a '−'. When there is no significant correlation the cell is shaded:

Factor	Response		
	Type of Dwelling	Type of Tenure	Urbanisation
Aging		−	−
Fertility		−	
Growth			
GDP per capita	+		
Divorces		−	−
Unemployment	−		
Youth unemployment	−	−	−
Income inequality (Gini)		+	+
Single person households	+	−	−

Except for growth, any other factor correlates at least with one response, often with several.

These factors aid in pointing to certain megatrends.

Let us take type of dwelling as an example. The following table 2 shows the three factors that have the most explanatory value:

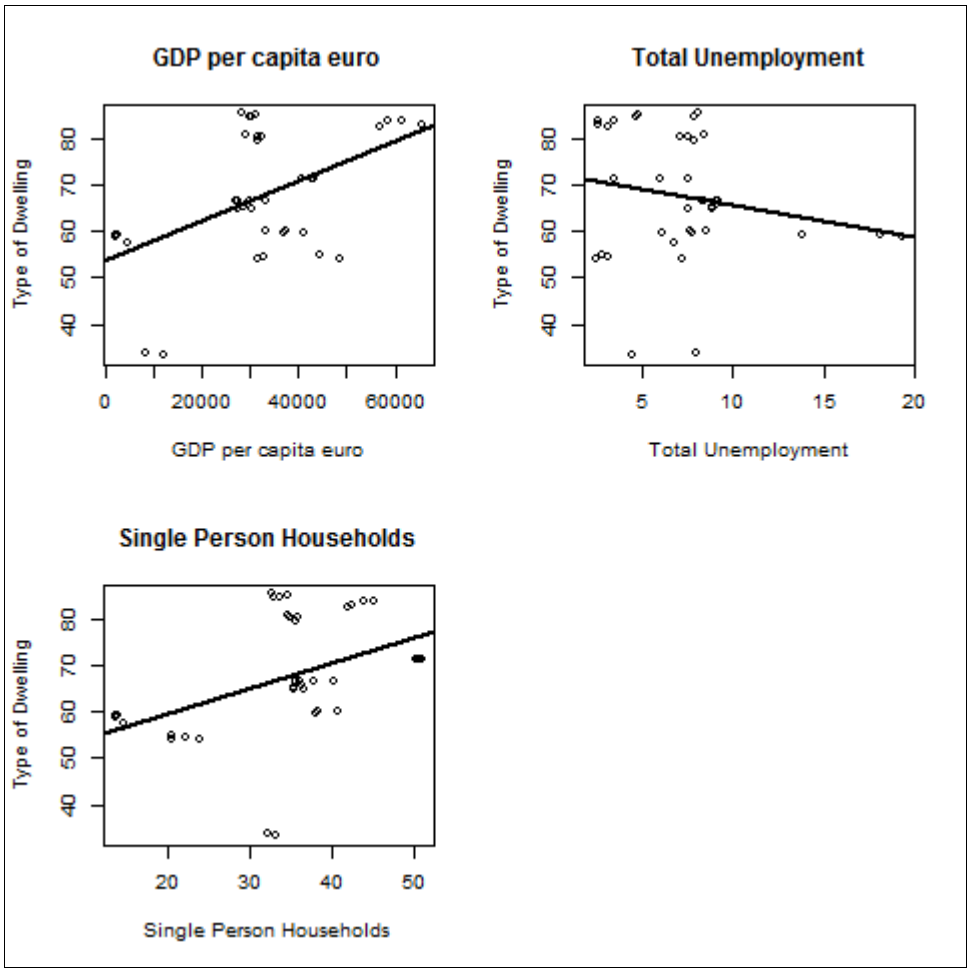

Table 2 Effects on type of dwelling, 2001–2014

The different graphs in the table are for illustrative purposes. However, the outcome of the analysis is quite clear on each of the factors shown.

Note that GDP per capita has a positive effect. This can loosely be interpreted thus: There is a tendency that a larger proportion of people will live in houses rather than flats when GDP per capita is high.

When interpreting the graphs one should take note of the inclination of each of the solid lines. The line for GDP per capita for example has a positive (upwards) inclination. Hence the interpretation above.

As for total unemployment, there is a negative inclination to the line. This means that a higher unemployment in a society will – all things equal – mean that there is less tendency for people to live in a house rather than a flat.

That there should be a positive correlation between the proportion of the population that live in households consisting of only one person (single person households) and the proportion of people that live in houses is rather paradoxical. The following example will illustrate how this may come about: Take a couple living in a house. They get divorced, and one of the parties remains in the house while the other party has to seek accommodation elsewhere. Often the new dwelling will be another detached house as flats are in short supply.

The three most significant effects on type of tenure are: single person households, fertility and divorces.

All these effects are negative, and they are shown in the following Table:

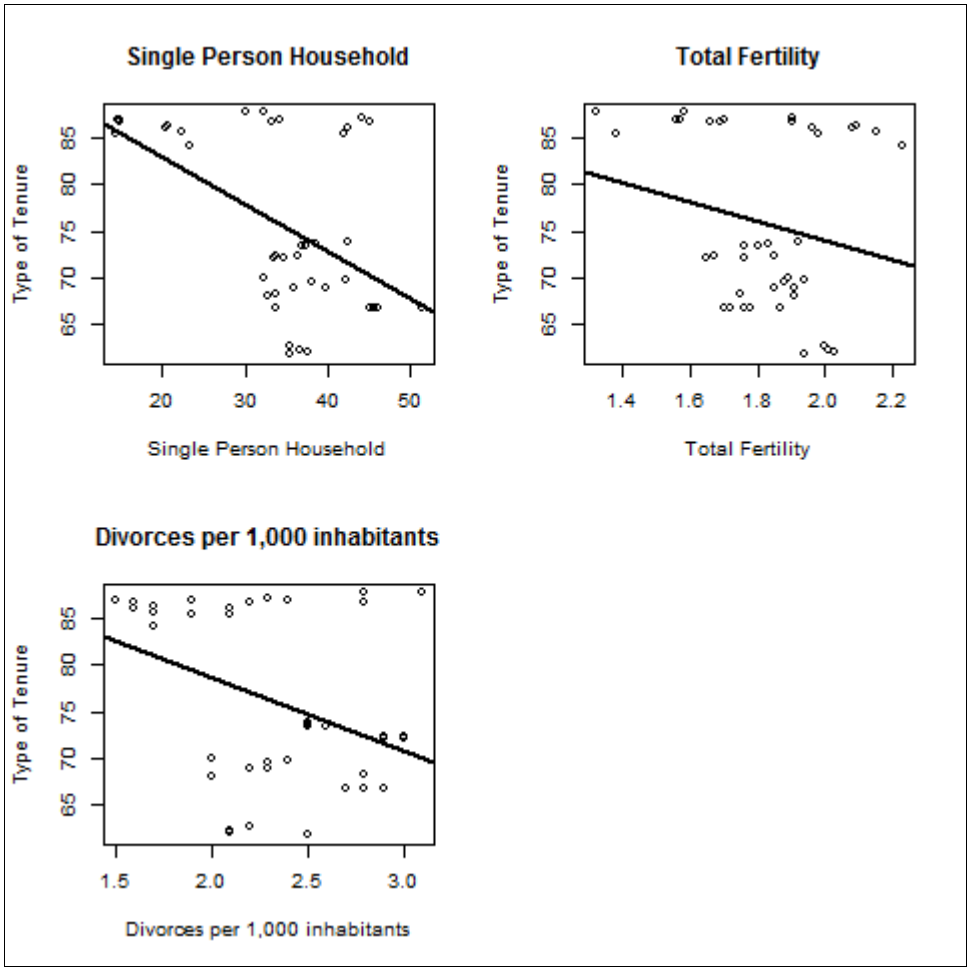

Table 3 Effects on type of tenure, 2001—2014

Those factors all point to a diminished tendency to own the dwelling that you live in.

As for single person households, the interpretation is quite straightforward: The financial situation of these households will often be such that they cannot get a loan to buy a house or a flat, and they will have to rent their dwelling.

Where the fertility rate is high, there is a tendency that more people will live in rented dwellings. It is often not affordable for families with children to own their dwellings.

A divorce often means that either party of the family will lack the financial means to stay on in an owned dwelling or even to buy a new one.

The last response type is urbanisation, and the main factors influencing that are: aging, single person households, income inequality, and youth unemployment.

The effects are shown in table 4:

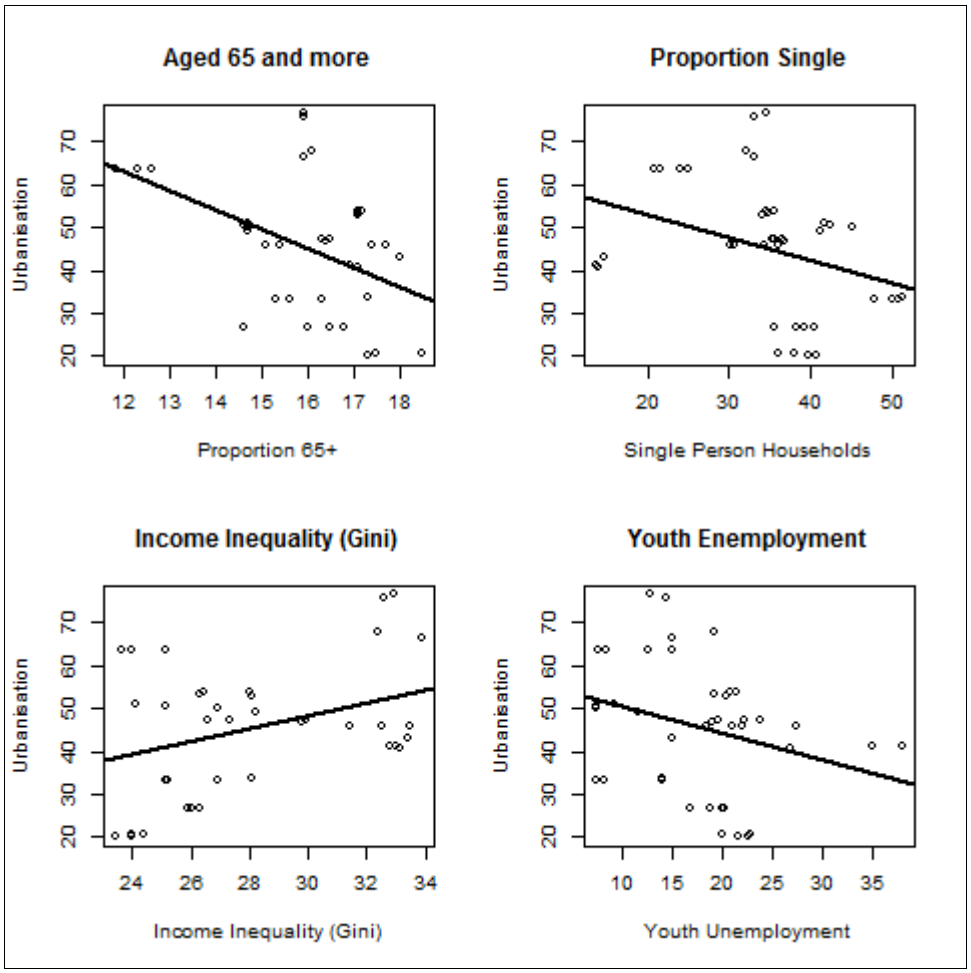

Table 4 Effects on urbanisation, 2001–2014

As the proportion of 65+ year olds gets higher, a smaller percentage of the population will live in densely populated areas. People in this age group will often have a choice of where to settle, and they will settle in less populated areas where housing costs are lower, or where they are in contact with nature. So the urbanisation diminishes.

In this context we note a tendency for people of 65 and over to continue working. Whether that tendency is strong enough to go against the trend towards less urbanisation for this age group, remains to be seen.

A high proportion of single person households in a given society will often go together with less urbanisation. The reason could be financial as the housing costs outside the densely populated areas are less.

A higher degree of income inequality will often go together with more urbanisation. People with high incomes can settle everywhere, but often they will choose to settle near their work which is in the city. People of lesser means often do not have that choice, but will have to live near their work places, and that means the city.

As we saw for the aging population, young people out of work will choose to live where the housing is affordable. If their situation is permanent – which sometimes may be the case with youth unemployment – they will move to less urbanised areas where their housing needs can be met at a lower price.

Conclusion

All things being equal, we can summarise these megatrends:

- Type of dwelling: *a diminished tendency for living in a house*. On the basis of recent trends, the following is likely to happen: When we look at the three main drivers for this response, we expect that the GDP per capita will decrease (Rodrik 2013), and that would tend in the direction of fewer people choosing to live in a house. If there is a growth this will be in the form of *jobless* growth. The trend is to robotise more and more production. So fewer hands are needed to run a production unit, and this also goes for white collar jobs where the trend to automation also is clearly visible. This way we see an increase in unemployment, or in any case a not diminishing unemployment, and this tends also in the direction of more people living in flats. We expect single person households to remain the same level; so this driver is neutral

- Type of tenure: *an increased tendency for people to live in rented dwellings*. All of the main factors are negatively correlated to type of tenure (proportion of the population that owns their home). Single person households will remain the same as stated above; fertility rates will level off, see Lanzieri 2013; divorces will

remain much the same. All these factors would tend in the direction of no change in the level of people who own their dwelling. However, we expect youth unemployment and the 65+ group will increase. And both of these factors would mean an increased tendency for people to live in rented dwellings. Because of that we see a diminishing proportion of the population who will own their dwelling

- Urbanisation: Judged by the development of the factors of this response we expect there to be *less urbanisation*. A strong effect is aging populations which tend towards less urbanisation. Single person households remain the same level. Income inequality will be increasing, but this effect does not offset the effect of the aging population. We expect youth unemployment to increase. So all in all we think the vector points toward less urbanisation

So, in conclusion we think that more people will settle in flats, they will have to rent their dwelling, and they will be forced to live in a less populated area.

In the recent past - in the period 2005-2011 (cf. Eurostat (b)) - urbanisation has generally decreased. This tendency, however, comprises different developments. Urbanisation has increased in Belgium, Norway and Sweden. It has fallen in Finland and France to some extent and in the UK to a large extent. Many people just cannot afford the rents in the big cities such as London and Copenhagen. The other countries are stationary. Younger people are moving to major urban centres and their suburbs. Educational opportunities and especially new types of service jobs attract them to live in the larger cities. Centralisation of education opportunities and of public and private services, such as health, public transport services, and retail also pull them into the cities. At the same time, phasing out of jobs in the first and the second production sectors also means that there is no future for them in staying put. All of this means that empty villages and small towns turn into unattractive and economic declining places.

This is a development found in all the countries studied. Since the beginning of the 1990s this development is prevalent in all the Nordic countries and in Estonia as well as in parts of the other European countries. The peripheral regions continuously lose population to the urbanised capital areas: Oslo, Reykjavik, Stockholm, Helsinki, Tallinn, Copenhagen, Brussels, London, Paris, and Sofia. Here an underlying trend is migration across countries from poorer to more wealthy regions in Europe and elsewhere. Parallel with this the tendency towards an aging indigenous population and younger persons settling in growth areas offering new job opportunities can be seen. Here the transition countries (Bulgaria and Estonia) are losing a younger and well educated workforce and experience. The aging population often depends on support from family members working and living in more prosperous countries.

These developments have influenced ways of residing across countries and within countries. The housing stock and housing tenures have to accommodate new types of households, age groups and cultures. New types of households and lifestyles are to be housed in an often very static housing

stock fit for past eras. This is not a new situation. However, changed patterns of settlements are a special challenge across age groups and households. The existing housing stock and redeveloped industrial areas have to accommodate more but smaller households.

References

Andersen, H. S., Vestergaard, H., Gottschalk, G., Groes, N., Christoffersen, H., Larsen, K. B. (2001), *Det danske boligmarked: udvikling i boligforsyning og boligønsker* [The Danish housing market: Housing supply and housing wishes], Copenhagen: Statens Byggeforskningsinstitut (SBI) & Amternes og Kommunernes Forskningsinstitut

Andersen, H. S. (2009), 'Explanations for preferences in Denmark for surroundings and location of the home'. In ENHR conference 28 June 2009 – 1 July 2009: Changing Housing Markets. Integration and Segregation. Prague, Czech Republic.

DiPasquale, D. and Wheaton, W. C. (1996), *Urban Economics and Real Estate Markets*. Englewood Cliffs, NJ: Prentice Hall.

Eurostat (a) Population on 1 January by broad age group and sex [demo_pjanbroad] accessed 20 July 2014

Eurostat (b), Urban Audit (http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_lvho01&lang=en, accessed 13 June 2014 <or: http://epp.eurostat.ec.europa.eu/portal/page/portal/region_cities/city_urban/urban_audit_data_collections

Haffner, M. and Dol, K., (2010), *Housing Statistics in the European Union 2010*. Ministry of the Interior and Kingdom Relations, The Hague, September 2010

Halifax (Lloyds): Halifax House Price Index, cf link http://www.lloydsbankinggroup.com/media-/economic-insight/halifax-house-price-index/

Lanzieri, G. (2013), *Towards a 'baby recession' in Europe? Differential fertility trends during the economic crisis*. Eurostat. Statistics in focus 13/2013. Available at http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-13-013/EN/KS-SF-13-013-EN.PDF

National statistical bureaus

Rodrik, D. (2013), 'The Past, Present, and Future of Economic Growth'. Working Paper 1, Global Citizen Foundation. Available at http://www.law.nyu.edu/sites/default/files/upload_documents/GCF_Rodrik-working-paper-1_-6.17.131_0.pdf

Shiller, R. J. (2008), *The Subprime Solution: How Today's Global Financial Crisis Happened, and What to Do about It*. Princeton University Press.

Vestergaard, H. (2014), 'From physical improvement to holistic renewal: the Danish experience' in Turkington, R. and Watson, C. (eds), *Renewing Europe's Housing*. Bristol: Policy Press [forthcoming]

Vestergaard, H. and Haagerup, C. D. (2011), *Housing Situation and important Housing and Planning Policy Issues*. (Unpublished working paper presented 22-25 September 2011 at International NordForsk Researcher NetWork Colloquium #8 on 'Visions of Residential Futures : Architecture and Sociology' in Göteborg, Chalmers Architecture, Sweden.)

Vestergaard, H. (2006), ‘Single family detached housing: a branch of paradise or a problem?’. In J Doling, J. and Elsinga, M. (eds), *Home ownership: Getting in, getting from, getting out*. vol. II, Delft: IOS Press, 75-92.